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## **Deployment Stressors of the Iraq War**

## **Insights From the Mainstream Media**

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A comprehensive understanding of the stressors of the Iraq War is needed to ensure appropriate postdeployment assessments and to inform empirical inquiries. Yet we are unaware of any published studies that address the range of stressors experienced by this cohort. Thus, in the present study, we report the results of an interpretive literature review of mainstream media reports published from the beginning of the Iraq War in March 2003 to March 2005. This literature revealed a combination of stressors associated with traditional combat, insurgency warfare, and peacekeeping operations. The increasing deployment of National Guard/Reservist personnel, older soldiers, and women highlights additional stressors associated with sexual harassment and assault, preparedness and training, and life and family disruptions. This is a cause for concern as war-zone stressors have been implicated in postdeployment health outcomes, including intimate partner violence and child maltreatment, immediate physical and mental health, and long-term adjustment.

**Keywords:** stressors; media; war; deployment; Iraq; review

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↑ t this writing, over 3,400 U.S. military members have died since the Iraq War began in March 2003 (Directorate, 2007). For each of those dead, it is estimated that nine more have suffered physical injuries (Hull, 2004). The psychological impact is harder to quantify, with one study indicating that one in six returning combat soldiers<sup>2</sup> have reported symptoms of anxiety, depression, or posttraumatic stress disorder (PTSD; Hoge et al., 2004). These initial numbers are not surprising as it is well established that war-zone exposure is associated with negative mental health outcomes (e.g., King, King, Gudanowski, & Vreven, 1995; Kulka et al., 1990; Litz, King, King, Orsillo, & Friedman, 1997; Wolfe, Erickson, Sharkansky, King, & King, 1999). In addition, given that it often takes time for the full effect of war-zone exposure to be realized (e.g., Friedman, 2004; Shane, 2004), one might expect that the number of Iraq War veterans reporting negative mental health consequences will increase over time. This is a cause for concern as previous research has shown a relationship between exposure to war-zone stressors and intimate partner violence, child maltreatment, immediate physical and mental health, and long-term adjustment (e.g., Beckham, Feldmen, & Kirby, 1998; Gimbel & Booth, 1994; Hoge, Auchterlonie, & Milliken, 2006; Hoge et al., 2004; Kaylor, King, & King, 1987; King, King, Vogt, Knight, & Samper, 2006; Marshall, Panuzio, & Taft, 2005; Orcutt, King, & King, 2003; Rentz et al., 2007; Rentz et al., 2006).

An adequate understanding of the impact of war requires knowledge regarding the deployment experiences of returning veterans. Yet we are unaware of any published empirical studies that address the range of stressors experienced by U.S. military personnel deployed to the Iraq War. This is almost certainly due to the length of time it takes from the initial conceptualization of a study to the publication of findings in a forum accessible to the field. Without information on the range of deployment experiences of the current veteran cohort, practitioners and researchers are likely to draw primarily from what is known about prior generations of veterans (e.g., Gulf War I veterans, Vietnam veterans) to inform their thinking about the deployment experiences of Iraq War veterans. Although some generalizations may be appropriate, there may be salient differences that limit the applicability of prior findings. This is problematic given that an adequate understanding of the full breadth of the deployment experiences of Iraq War veterans is necessary to ensure the appropriateness of clinical assessments and the relevance of research questions for this cohort.

In the absence of a well-developed empirical literature, one potential source of information regarding the experiences of Iraq War veterans is provided via contemporaneous reporting based on interviews with returning veterans and by independent and embedded media field correspondents. The power and influence of the media cannot be denied in shaping public

opinion, policy, and potentially, the direction of research. Popular press materials, although anecdotal and qualitative in nature, can provide insight into the deployment experiences that may have long-term implications for health and adjustment. Thus, the goal of the present article was to describe the results of an interpretive literature review of mainstream media reporting on the experiences of members of the U.S. Armed Forces in the Iraq War. Several key questions were addressed: What is the nature of combat in Iraq, and what stressors does this present? Are some stressors more salient for certain subgroups of deployed personnel (e.g., women vs. men)?

This review was not intended to be a formal meta-analysis. Instead, the goal was to highlight stressors of this deployment to inform clinical assessment and provide heuristic value to researchers who wish to pursue systematic qualitative or quantitative studies of the stressors of the Iraq War. In the following section, we describe our method of reviewing the literature, after which we present a summary of our major findings.

#### **Review Methodology**

Our goal for this article was to review reports that have appeared in the media since the Iraq War began to gain a better understanding of the deployment stressors experienced by veterans of this conflict. The framework for this project built on our previous work conceptualizing war-zone stressors for Vietnam veterans (King et al., 1995) and, more recently, for Gulf War I veterans (King et al., 2006; Vogt, King, & King, 2004). The work with Vietnam veterans focused on mission-related stressors that were salient for this cohort of veterans, including combat exposure, perceived threat, aspects of the malevolent war-zone environment, and exposure to atrocities and abusive violence. Later work confirmed the relevance of similar mission-related stressor conceptualizations (i.e., combat exposure, perceived threat, aspects of the difficult living and working environment, and experiences associated with the aftermath of battle) among Gulf War I veterans. This latter work also involved focus groups to identify other relevant stressors, particularly those that might be salient for the growing number of National Guard and Reservist personnel and women deployed for that conflict. Based on these focus groups, we expanded our initial framework to include lack of preparedness and perceived nuclear, biological, or chemical (NBC) exposures, as well as a number of interpersonal stressors, including concerns about life and family disruptions, lack of deployment social support, and exposure to sexual and general harassment.

Informed by this prior work, we identified seven overarching constructs that provided a preliminary conceptual foundation for the review: (a) aspects

of traditional warfare, including combat exposure, perceived threat, features of the difficult living and working environment, and exposure to the aftermath of battle; (b) exposure to environmental toxins (NBC exposures); (c) preparedness and training (i.e., the extent to which military personnel had the proper equipment and instruction to complete required tasks); (d) lack of deployment social support and poor unit cohesion; (e) sexual harassment and assault; (f) general harassment (i.e., exposure to harassment that is non-sexual but that may occur on the basis of one's biological sex, race/ethnicity, sexual orientation, or other minority status); and (g) concerns about life and family disruptions (i.e., concerns about damaging one's careers and/or relationships with partners or family members). Importantly, throughout the review we were attentive to the possibility that other themes might emerge, and we kept a running list of additional stressors that were mentioned but not subsumed within our previously identified categories.

We conducted our review via LexisNexis Academic, which provides fulltext documents from more than 5,600 sources, including national and regional newspapers. We limited our search to print news media published between March 20, 2003, and March 20, 2005, in the English language in the northeast region of the United States, using the search terms *Iraq* and *military or soldier*. We screened the 29,054 resulting citations, looking for those that described soldiers' deployment experiences, and we used the previously described constructs to provide an organizing framework for our review of this literature. Members of the review team (the four authors) periodically met to reach consensus regarding whether newly identified stressors appeared frequently enough to warrant inclusion as a separate category. Several additional themes emerged, and we added them to our conceptual framework. These constructs included the impact of insurgency warfare, stressors related to peacekeeping duties, and the unique situation of older soldiers. In addition, given our recognition of the growing number of National Guard/Reservist personnel and women deployed for this war and the possibility that these groups might experience differential stressors compared to more traditional military personnel (Evans et al., 2001; Samper et al., 2005; Vogt, Pless, King, & King, 2005), we also attended to articles that addressed the experiences of these populations in our review.

We excluded 11 categories of articles from consideration. These included articles that focused on (a) American policy and politics, such as statements of support or dissent from various special interest groups, (b) American military operations unrelated to the Iraq War, (c) the nature of injuries and the health status of returning veterans, (d) the status of military recruiting, including statistics or new recruiting tactics, (e) defense contracts and war technology, (f) world politics and policy related to Iraq, (g) experiences of the Iraq people in general, such as living conditions and the death of loved

ones, (h) death announcements, such as soldier obituaries and articles expressing family sorrows, (i) volunteer efforts to support the war and those deployed, (j) book or movie reviews, and (k) commentaries or opinion pieces. We next took the resulting articles (approximately 10,000) and perused them to confirm that none fell within the above exclusion criteria. After removing duplicate articles (i.e., articles that appear in multiple newspaper outlets) and eliminating articles that had highly overlapping content (e.g., articles addressing the same major aspects of an insurgent attack), we retained a total of 336 articles. The majority of these articles reported on interviews with military personnel and included direct quotes from military personnel regarding their deployment experiences.

We kept a running count of the articles that addressed each of our identified deployment stressor themes as we conducted our review, incorporating newly identified constructs into this coding scheme and reviewing articles again to ensure that we had an accurate count of articles classified according to the newly identified constructs. It is important to note that a single article could fall into one or more categories depending on the range of experiences discussed within that article. As shown in Table 1, the most frequently discussed categories were insurgency warfare, concerns about life and family disruptions, situations related to National Guard/Reservist personnel and aspects of traditional warfare. Other topics discussed were situations related to female soldiers, sexual harassment and assault, and situations related to older soldiers. Categories that appeared minimally in the literature included lack of deployment social support and poor unit cohesion, exposure to environmental toxins, and general harassment.

Below, we describe the results of our review of the literature. The first section, "The Nature of Combat in Iraq," reviews articles addressing stressors related to aspects of traditional warfare, insurgency warfare, and peacekeeping activities. The second section, "The Changing Face of Military Deployments," addresses stressors that may be especially salient given the increasing deployment of National Guard/Reservist personnel, older soldiers, and women. These stressors are related to sexual harassment and assault, preparedness and training, and life and family disruptions.

#### The Nature of Combat in Iraq

#### **Aspects of Traditional Warfare**

Just as for previous wars, Iraq War military personnel have been exposed to circumstances of traditional combat, including experiences such as being

Table 1
Number and Percentage of Media Articles That Addressed
Each Deployment Stressor Category (N = 336)

Category	Number	Percentage
Insurgency warfare	166	49
Concerns about life and family disruptions	91	27
Situations related to National Guard/Reservist personnel	88	26
Aspects of traditional warfare	85	25
Preparedness and training	70	21
Peacekeeping activities	56	17
Situations related to female soldiers	38	11
Sexual harassment and assault	18	5
Situations related to older soldiers	7	2
Lack of deployment social support and poor unit cohesion	6	0.02
Exposure to environmental toxins	3	0.01
General harassment	0	0

in firefights, dealing with injured soldiers, observing the bodies of those killed in action, and the horror and helplessness that often accompany such experiences. One soldier asked about his combat experiences explained, "The bullets were flying . . . It was scary" (Jackson, 2005). An Army medic who worked with a fatally injured blast-victim commented:

You feel awful whenever you see such a thing . . . but, there's no time to think, much less to break down and cry. There's just an automatic reaction—you start working as soon as you reach the victim, and you don't stop until you land at the hospital. (Abrams, 2005)

As prior research findings indicate, these circumstances can have implications for both acute and chronic stress reactions in the postdeployment period (e.g., Green, Lindy, Grace, & Gleser, 1989; Kardiner & Spiegel, 1947; Kaylor et al., 1987; Kulka et al., 1990; Orsillo, Roemer, Litz, Ehlich, & Friedman, 1998; Solomon, Garb, Bleich, & Grupper, 1987). A number of low-level stressors often accompany exposure to combat (Burns, 2004; King et al., 1995). For example, boredom can be a stressor for some military personnel (Crittenden, 2003; Zremski, 2003). As one battalion support member explained, "In combat, there's two things . . . bored out of your mind or scared out of your mind . . . and some of us like scared to death because it makes the time go faster" (Barnard, 2004).

Long work hours and lack of sleep are also an issue for many soldiers. According to media reports, it is not uncommon for soldiers to work 13-hour shifts for 2 or 3 weeks at a time, and during sustained operations, combat soldiers often get less than 4 hours of sleep a night (Hay Brown, 2005; Kosecki, 2005). Media reports also underscore the poor living conditions some military personnel face. One specialist spoke of "sandstorms so fierce you can't see your hand in front of your face," as well as temperatures reaching 152 °F, and tight living conditions with 36 cots crammed into a missile silo (Stone Lombardi, 2004). Another soldier noted that "huge rats and the occasional snake" would invade some sleeping areas (Dolloff, 2005). Prior studies indicate that the accumulation of low-level war-zone stressors can have negative long-term health consequences (e.g., King, King, Foy, Keane, & Fairbank, 1999; Litz & Bolton, 2000).

#### **Insurgency Warfare**

A large component of the Iraq War has also involved exposure to circumstances of insurgency warfare. Unlike traditional warfare, where enemies meet face-to-face on a front line, insurgents mix into the populace, infiltrate enemy lines, and organize guerilla-type ambushes to demoralize and wear away at the opposing force (Krepinevich, 2004). "It's scary. You don't know who's friend and who's foe. They're not wearing uniforms," said one soldier (Talbot, 2003). Another added, "In this war, you don't know who's who. You don't know who to shoot at until they start shooting at you" (Barone, 2005). This style of warfare has implications for soldiers at all levels, not just infantry, because as one colonel explained, "[T]here is no front, there is no rear. Soldiers of all specialties will face direct contact with an adversary" (Shanker, 2004). "This place is still dangerous no matter where you are. Even inside, eating our lunch," another said (Caywood, 2004a). As these soldiers indicated, attacks can occur even within American military camps, with "chow halls" being a popular target ("Guardsman," 2004; Redmon, 2004). In one chow hall attack that killed 24 soldiers "[t]he force of the explosions knocked soldiers off their feet and out of their seats. A fireball enveloped the top of the tent, and shrapnel sprayed into the men" (Redmon, 2004).

Insurgency warfare introduces ambiguity surrounding the rules of engagement. For example, insurgents have taken advantage of places or groups traditionally deemed beyond the reach of war. Such tactics have included keeping weapon caches in schools or mosques, planting bombs on women, and using children to lure soldiers into vulnerable positions (Searcey, 2005a; Smucker, 2003). Another place where the stress of this ambiguity has been

highlighted is at checkpoints (Searcey, 2005b). When troops see a car that is speeding and ignoring warning shots, they have only a few seconds to assess if it is a suicide car bomber (Ramirez, 2005). One Marine described a near-miss situation in which he shot the driver of a car loaded with explosives that was careening toward his checkpoint, "I thought that was it for me, I really did" (Murphy, 2005). The situation at checkpoints can also be unclear for Iraqi civilians (Ciezadlo, 2005; Himaras, 2005). Cultural differences in language and nonverbal communication further complicate the situation. For example, the American hand signal used to indicate "Stop" (arm straight, palm out) is a welcoming gesture in Iraq. Other commonly used American hand gestures, such as pointing or giving a "thumbs ups," are extremely offensive in Iraqi culture, and may be interpreted as a sign of aggressiveness. This type of miscommunication may have played a role in a number of tragic accidents in which Iraqi civilians have been maimed or killed (McFeatters, 2003; "Rules of Engagement," 2005). Studies with prior cohorts suggest that guilt surrounding such incidents may be quite troubling for some military personnel and is associated with PTSD severity (Henning & Frueh, 1997; King & King, 1994).

Another insurgent tactic that has received a great deal of media attention is the use of Improvised Explosive Devices (IEDs) to attack U.S. military vehicles and convoys (Azzopardi, 2005; Grindle, 2004). IEDs are often hidden in benign-looking objects, such as a piece of garbage, a toy, or an animal carcass (Daniel, 2005; Nickerson, 2003), and have resulted in many soldier deaths (Garwood, 2004; Shanker & Schmitt, 2004). A soldier explained. "I am not afraid to shoot a rifle or be in combat, but I'm afraid of the IEDs. There's no way to defend yourself" (Gentile, 2004). As another soldier described, "All of the sudden, the ground in front of you erupts and all you see is shrapnel and cement and fire and smoke" ("The Danger," 2004). One fire control officer stated, "I have come to hate garbage in a whole new way . . . Everywhere else in the world, litter is unsightly and garbage smells. But in Iraq, it kills" (Nickerson, 2003). At the time of writing, explosive devices accounted for more than half of American casualties (Defense, 2007). In addition, more than 18,000 soldiers have sustained injuries due to these devices, which may have repercussions for their ability to cope with other deployment stressors and their postdeployment mental health ("Defense," 2007; Schnurr & Green, 2004; Schnurr & Jankowski, 1999).

Another complication is that much of the insurgency warfare has taken place in urban settings. The director of the Marine Corps Center for Emerging Threats and Opportunities explained:

Moving into urban terrain is the one way our adversaries can level the playing field . . . It's the most complex battle space you can find yourself in, the way buildings conceal and channelize your movement and give your enemy cover, and the civilians that compact the problem. (Scott Tyson, 2004)

A general elaborated, "It is very different and very difficult, beyond what we've ever had to do . . . This puts infinitely more demand on our young soldiers and leaders, because in urban operations you have to be very decentralized" (Scott Tyson, 2004).

The constant pressure of this insurgent warfare can be wearing, physically and emotionally. Previous studies indicate that such ambiguity and the need to restrain force can result in feelings of fear, frustration, anger, and resentment that may sometimes be expressed through callousness or unnecessary acts of violence (e.g., Litz, 1996; Litz & Bolton, 2000). Exposure to unpredictable and uncontrollable danger has also been linked to increased risk for PTSD (e.g., Foa, Zinbarg, & Rothbaum, 1992).

A central feature of insurgency warfare is exposure to atrocities (Krepinevich, 2004). When discussing his deployment experience, one soldier spoke of seeing a little girl with a bullet in her head (Conkey, 2005). "We've had some gruesome stuff out there," said another as he spoke of helping to recover the remains of kidnapped political prisoners, some of whom were badly mutilated and beheaded (McGee, 2005). An atrocity that received a great deal of press coverage was the capture, torture, and eventual burning of four Americans who were hung from a bridge in Fallujah (Barnard & Cambanis, 2004; Yacoub, 2004). In addition, grisly suicide bomber attacks have made headlines, with witnesses of one of the deadliest attacks describing it as "a scene of horrific carnage, with huge pools of blood visible on the pavement and mangled bodies being loaded onto wooden handcarts. Outside the clinic, blood could be seen splashed on a wall above a first-story window" (Jaff & Worth, 2005). The insurgents are not the only ones that have been implicated in atrocities. One Apache helicopter pilot described a strike on a house: "When the gunfire ended, there was silence. But then children's cries and screams drifted from the destroyed home. I didn't know there were kids there . . . those screams are the most horrible thing you can hear" (Welch, 2005). A high-profile atrocity that received extensive media attention was the alleged humiliation and torturing of detainees at the now infamous Abu Ghraib prison (Bender, 2004a; Bernstein, 2004). Previous research has demonstrated the negative mental health consequences of exposure to and participation in extraordinary acts of violence (e.g., Gallers, Foy, Donahoe, & Goldfarb, 1988; Green, Grace, Lindy, Gleser, & Leonard, 1990; King et al., 1995).

#### **Peacekeeping Activities**

Contemporary media reports highlight additional stressors related to what would be characterized as peacekeeping activities, such as delivering supplies in an environment characterized by political–social instability and difficulties in working with locals (Francis, 2005; Oppel, 2004; Wilson, 2003). The importance of peacekeeping activities is exemplified by one Iraq War soldier who stated:

Our forces use these "small" gestures to build long-lasting relationships with the towns we operate in. The locals are more likely to support us and root out the bad apples [the insurgents] among them when we show some goodwill, such as school supplies . . . . A pack of pencils given to a small school child may one day save a soldier's life. (Patinkin, 2005)

Like traditional combat, peacekeeping activities can involve long periods of inaction and boredom that may seem incongruent with the conditions for which soldiers were trained (Crittenden, 2003). Previous research has demonstrated that stressors of this nature are associated with psychiatric distress (e.g., Litz et al., 1997; Orsillo et al., 1998). Moreover, peacekeeping missions that evolve into war-like situations may be particularly difficult for soldiers. When placed in these situations, military personnel report increased anger and hostility and more severe PTSD symptoms (e.g., Litz, 1996; O'Connor, 2004).

#### The Changing Face of Military Deployments

Reflecting the reduction in the number of full-time Active Duty personnel, about 40% of those in the Iraq theater of operations are members of the National Guard or Reserves (Sisk & DeFrank, 2004). Although few researchers have examined whether there are differences in deployment stressors and their associated health consequences for Active Duty versus National Guard/Reservist personnel, some studies have found that National Guard/Reservist personnel experience poorer mental health outcomes compared to Active Duty personnel (e.g., Iowa Persian Gulf Study Group, 1997; Stretch et al., 1996). This may be related to differences in demographic/background characteristics, military training, and family responsibilities (Vogt, Samper, King, King, & Martin, 2007).

In addition to the increased deployment of National Guard and Reserve members, there has also been an increase in the number of older troops. The Army recently raised the recruitment age limit from 34 to 39 for the National Guard and Reserves, and is activating more older soldiers, some of whom are in their 50s and 60s (Davis, 2004; Foehlinger, 2004; Gorfinkle, 2004). A 56-year-old soldier with an artificial hip who had been out of the military for more than three decades stated he was "surprised but proud to serve his country" (Campenella, 2005). One Army sergeant, who had been out of military service for 12 years, summed up one of the challenges of this cohort when he stated "The equipment is all different" (Mooney, 2005). Although it is well known that younger age at the time of deployment is a risk factor for poor mental health outcomes (e.g., Green et al., 1990; King, King, Foy, & Gudanowski, 1996), older troops may also be at risk for poor adjustment given that they may feel they are not well prepared for the rigors of deployment and may have more concerns about life and family disruptions caused by deployment.

Another group that is being deployed in record numbers is women. Thus far, more than 100,000 women have served in the Iraq theater of war (Semuels, 2005). While women are officially prohibited from serving in direct combat units, interviews with women reveal that they are being exposed to and participating in combat. "The rules of combat have completely changed . . . [W]e're already taking bullets" stated one female soldier (Becker & Sisk, 2005). A number of women have confirmed kills, and women have received Army Commendation Medals, Purple Hearts for enemy-inflicted wounds, and Bronze Stars with combat "V" for valor under fire (Barone, 2005; Bender, 2005a; Sisk, 2004). One woman wrote to The Boston Globe from Baghdad stating, "Females have been used on raids where they know that they need a female to search. There is no defined front line anymore in the battlefield. Pretty much everyone is learning basic infantry skills" (Bender, 2005b). A military policewoman concurred, explaining that she "sees little distinction in this war between units that allow women and those that don't," adding, "We're out there just as much as the infantrymen are" (Caywood, 2005). Women who join the military are more likely than their male counterparts to have a history of prior trauma exposure (e.g., Rosen & Martin, 1996a, 1996b), and this may make them more susceptible to the negative effects of additional stress in the war zone (e.g., Merrill, 2001; Suris, Lind, Kashner, Borman, & Petty, 2004). Moreover, whereas some studies indicate that war-zone exposure has a similar negative impact on the postwar health of both women and men (e.g., Kulka et al., 1990; Sutker, Davis, Uddo, & Ditta, 1995), other studies have found differential effects of war-zone experiences for women and men (e.g., Vogt et al., 2005).

Perhaps in part due to the growing representation of deployed National Guard/Reservist personnel, older soldiers, and women, media reports have addressed a number of aspects of the Iraq War that may be particularly

germane for these subgroups. Specifically, reports have appeared on issues related to sexual harassment and assault, preparedness and training, and life and family disruptions.

#### Sexual Harassment and Assault

With the increase of women deployed to Iraq, the issues of sexual harassment and assault have received increased attention. Reports of sexual harassment and assault perpetrated by fellow military personnel, superiors, allies, and foreigners have surfaced in the media ("Sexual Assaults," 2005; Siemaszko, 2005; "Victims," 2005). Incidents, most frequently reported by women, have run the gamut from postings of nude female soldiers on an "amateur porn" site (Lathem, 2005), to attempted and completed rapes (Susman, 2004). "It's sad to say . . . but I trusted the Iragis more than I trusted some of the people I worked with," said one female Army captain (Clemetson, 2004). There have also been reports that some sexual assault victims have not received adequate support following these experiences, with needed medical care, rape kits, and postassault counseling denied to some victims, and other victims asked to take polygraph tests and threatened with retaliation if they file a report (Schmitt, 2004; Siemaszko, 2004; "Soldier: Army," 2003). "I felt abandoned. They acted like they didn't even care," said one woman after describing an assault in which she was gagged and tied and had her clothes cut off ("Soldier Who," 2004). These events can be even more complicated when experienced in a war zone, with limited privacy, the constant threat of attack, and the possibility that the perpetrator may be in a position to save the victim's life at a later time. Prior research findings indicates that experiences of sexual harassment and assault during deployment have significant implications for postdeployment health (e.g., Vogt et al., 2005; Wolfe, Schnurr, Brown, & Furey, 1994).

#### **Preparedness and Training**

The extent to which military personnel are adequately prepared for deployment has received a great deal of media attention since the Iraq War began (Banerjee & Kifner, 2004; "Dodd," 2005; Shanker & Schmitt, 2004). After their initial training, members of the National Guard and Reserves typically train 1 weekend a month and 2 weeks in the summer ("Army Reserves," 2005). As a consequence, they may not be as well prepared for combat as Active Duty personnel who are able to build and reinforce their skills on a daily basis. Dr. Matthew Friedman from the Veterans Administration's

National Center for PTSD explained, "Because they receive relatively little warning before deployment and are often less prepared for combat than soldiers in regular units . . . . Guards and Reserve troops are more prone to posttraumatic stress" (O'Connor, 2004). Some military members have been deployed to the Iraq theater with only 24 hours notice (Crouse, 2003; Falchek, 2005). In addition, media reports indicate that National Guard personnel are often relegated to older and poorer equipment (Bender, 2004b; "National Guard," 2003). One National Guardsman wrote to the head of Central Command to highlight the problem, stating, "I personally think it is a joke in poor taste when they say no unarmored vehicles leave the bases in Iraq. But being in a Guard unit with older vehicles, we do exactly that and are at even more of a disadvantage than our Active Duty counterparts" (Sisk, 2005). This issue was reflected in the media earlier in the Iraq War when a supply convoy, lacking armored vehicles, refused to go on a selfdescribed "suicide mission" (Davey, 2004a; Sisk, 2005) and also when a National Guardsman asked Secretary of Defense Donald Rumsfeld why they must scrap for protective metal to put on their humvees (Abrams, 2004; Axtman, 2005). Some troops, feeling unprepared for battle, have chosen to buy their own supplemental protection, including body armor, special hydration gear, advanced combat helmets, medical supplies, and even vehicle armor (Baldor, 2005; Files, 2005; Kesich, 2003).

#### Life and Family Disruptions

As the U.S. Armed Forces are being stretched thin, some Army soldiers' tours of duty have been extended for up to 18 months or more (Bender, 2004c; Klein, 2004; Vaznis, 2004), and some military personnel have been surprised to find themselves deployed to the Iraq theater of operations on multiple occasions (Herbert, 2004). One soldier explained in a *New York Times* article:

I figured that the Army was big enough that one unit would not have to go back again before this thing was over . . . . It's my job and it's my country, and I don't have any regrets. But I kind of feel like I did my part. Just as I was readjusting to life back home, just as I was starting to feel normal again, this kind of throws me back into the waves. (Davey, 2004b)

One commander explained to an embedded reporter how being activated has affected him, "I have no life anymore. My kids are growing up, my business is dying. But I am bearing no sacrifice that's out of proportion with everyone else. I know guys who have lost marriages and lost jobs" (Searcey, 2005c).

Each time members of the National Guard and Reserves are activated, they must put their civilian careers on hold. This can raise concerns about missing out on promotions or other opportunities at work, and for some, concerns about whether they will still have their position when they return. Laws exist to protect their jobs, but the reality of the situation is not always clear-cut. These concerns may be especially prominent for personnel called up for multiple tours of duty (Richardson, 2004). For example, one National Guardsman received a letter during his deployment stating that his employer redefined and filled his position in his absence (Colquhoun & Hayward, 2005; "Returning," 2005). Another soldier reported suing his former employer after he lost his job when he was activated in support of Operation Iraqi Freedom (Bashinksy, 2003).

Additional stress can be added as families have to adjust to pared-down salaries during the deployment (Mangun, 2005; Scharfenberg, 2005). According to a Department of Defense study, 41% of Reservists earn substantially less while deployed than in their civilian jobs (Greenhouse, 2003; "Statehouse Briefs," 2005). Some families have even had to file for bankruptcy (Miller, 2005; Neuwahl, 2005). Financial and occupational concerns are especially salient to the self-employed and small business owners, some of whom have seen their businesses fold. Others have had to develop creative solutions to maintain their operations from overseas or transfer responsibilities (Semple, 2005a; "Store Closes," 2004).

Being activated can also strain personal relationships. One Active Duty Army specialist preparing for his second deployment explained that there has been some distance from his wife since his first deployment. Describing the situation, the specialist explained that "he hoped to remain a soldier for his career, though he worried about losing his family" (Davey, 2004b). This stress can also be difficult for soldiers with children. "The most crushing thing is to leave your children," explained one National Guardsman (Semple, 2005b). Some parents, who are single or are simultaneously deployed with their spouse or partner, must also struggle with determining how their children will be cared for while they are away (Semple, 2005a).

In addition, this deployment is one of the first with such ready e-mail and phone access to partners and family members (Knickerbocker, 2004; Lu, 2005; Wielawski, 2005). This immediate and intimate connection can be uplifting, but also stressful as the deployed military member experiences the immediacy of issues that his/her family may be facing at home, such as concerns regarding children, caregiving to parents, and financial issues (Huang, 2004; Semple, 2005a). This can be difficult for a military member who may have very little power to assist in or change the situation, possibly contributing to feelings of

concern, worry, and helplessness (Caywood, 2004b; Leukhardt & Somma, 2005). These emotions can be dangerous in a war zone because as one soldier explains:

With all the Web cams, cell phones, digital cameras and e-mail that are available now, it's possible for people to send information instantly that can weigh on soldiers and distract them from their mission . . . And that can be a problem for command, because we need our soldiers to concentrate on the mission, which is to keep themselves safe and their buddies safe. (Weber, 2004)

Studies suggest that soldiers who experience more concerns related to separation from family and friends experience poorer mental health on return (e.g., Bartone, Adler, & Viatkus, 1998; Johnson, Cline, Marcum, & Intress, 1992; Vogt et al., 2005).

#### **Discussion**

As we have demonstrated, it is possible to get a sense of the deployment experiences of Iraq War veterans from mainstream media reports. This knowledge can be of heuristic value for both clinical assessment and to inform the research questions that guide future investigations of deployment experiences and their impact on the health and well-being of Iraq War veterans and their families. Print coverage reveals a combination of deployment experiences that include stressors associated with traditional combat, insurgency warfare, and peacekeeping activities. These factors may create an environment of unrelenting pressure that has implications for the health and adjustment of returning troops. The changing face of military deployments, and specifically, the increasing number of deployed National Guard/Reservist personnel, older soldiers, and women, also enhances the salience of issues around sexual harassment and assault, preparedness and training, and concerns about life and family disruptions.

One limitation of this study relates to the possibility that media portrayal of deployment experiences and stressors may be biased. Arguments of bias in news coverage have been asserted from both liberal and conservative parties. Antiwar critics have accused the media of a conservative bias, citing the use of embedded media as a method to increase the extent to which the news reflects a military perspective. Those on the other side of the argument have claimed a liberal bias in the media, with news coverage focusing on the worst battles and American causalities, with only limited mention of military successes and humanitarian projects. In this vein, it is

important to keep in mind potential stressors that appeared minimally or less frequently in the literature (i.e., lack of deployment social support and poor unit cohesion, exposure to environmental toxins, and general harassment). The level of attention these topics receive in the media may not entirely reflect their relevance for postdeployment health and adjustment. Certain topics may have more popular appeal and therefore may receive more media attention than others (e.g., women's vs. men's experiences of sexual harassment during deployment). In addition, the importance of some stressors may not be fully recognized until a later time. For example, the impact of NBC exposure did not come to fruition until sometime after the 1991 Gulf War conflict, and veterans began presenting at hospital with unusual health symptoms that were later dubbed "Gulf War Illness" (Kolata, 2003; Loviglio, 2004). It is also unclear what role race and ethnicity may ultimately play in Iraq War soldiers' postdeployment adjustment. This issue may be especially relevant to soldiers of Arabic or Islamic background, as some research has indicated that racial stigmatization as well as cultural identification with opposing forces can uniquely and substantially contribute to PTSD symptomotology and generalized psychiatric distress (Loo et al., 2001; Matsuoka, Hamada, Kilauano, & Coalson, 1992).

A related limitation is that this review centers on media reports within the northeast region of the country.3 This can limit the generalizability of the results in a couple of ways. Some topics in this geographical area may have received more media attention because they involve community members or are otherwise salient for this region (e.g., activities of a unit deployed from a local military base). In addition, one might argue that there is a liberal bias in the media in this region of the country. Although there is undoubtedly bias inherent in some of the media reports we reviewed, and it is possible that the proportion of media reports we reviewed with a liberal versus conservative bent is not exactly equivalent (that is, there may have been more reports with a liberal bent), we note that each geographic region has papers that are regarded as having a more liberal or conservative bent. This political bent may result in a certain level of self-censorship. Yet typically for each liberal paper, there is a competing, conservative paper available and vice versa. In addition, news outlets across the country pick up stories from syndicated news services, such as The Associated Press, and this contributes to some degree of commonality in major news stories. Finally, no matter what the bent of the publication, there is both formal and informal oversight of newspaper journalist integrity. Reporters are held to a code of ethics in their work, with a responsibility to report the facts of a situation. With fact-checkers, editorial oversight, and newspaper reputations on the line, this responsibility is taken seriously by the industry.

While taking into account the possibility that the media reports we review are biased to some extent, it is important to note that the goal of this article was not to use media reports to estimate the severity and frequency of deployment stressors experienced by Iraq War veterans. Our goal was to provide a general description of potential deployment stressors that could be used to inform clinical assessment and guide research questions in the absence of published empirical studies of the deployment stressors of the Iraq War. In addition, this review provides something that many empirical reports do not. Specifically, this review allowed us to hear about the deployment experiences U.S. military personnel have faced in the Iraq War in their own words. Some of what we heard echoes from the past, such as when they speak of the terror of attack or the horror of human carnage. For these issues we can draw on the cannon of empirical literature that has resulted from research on prior conflicts. Other issues that arose through this review do not have the benefit of published research to guide our thinking about mental health implications. For example, we have yet to fully grasp the potential benefits and drawbacks of increased access to communication with family and friends throughout the deployment.

With the dearth of empirical studies available on the Iraq War deployment to date, these findings can provide a deeper understanding of and sensitivity to the breadth and variety of deployment experiences. Although each stressor is unique and may individually contribute to the welfare of each service member, this review may also be used to highlight and explore broader psychological themes that may warrant special consideration. One such theme is boredom with its associated "hurry up and wait" syndrome (Bartone et al., 1998; Crittenden, 2003). The psychological impact of long periods of boredom is not fully understood. Another theme that may be confounded by the constant pressure of possible insurgent attacks is trust or, more accurately, the violation of trust. In this high stakes environment, trust in the wrong person or decision can result in assault or fatal injury. Peacekeeping duties, combat assignments, or even a trip to the shower may present difficult and long-lasting dilemmas, which have ramifications that permeate not only the current situation but also the ability of soldiers to interact and trust postdeployment.

With veterans now returning from Iraq, researchers and clinicians need to be able to assess the experiences of this diverse population of veterans so that they can plan and implement more effective treatment programs. Accurate assessments require knowledge of relevant dimensions of veterans' deployment experiences. To the extent that important domains of risk for a particular patient population are not adequately assessed, the results of clinical evaluations may be misleading or incomplete. In turn, this may result in the inappropriate application of clinical care. For example, an emphasis on

traditional combat to the exclusion of other important war-related experiences (e.g., distress at separation from family, day-to-day discomforts, and extreme living conditions) might lead to the underestimation of the breadth of stressor exposure and a failure to identify those most at risk for negative health outcomes in the postdeployment period. It is also important to identify risk relevant to specific veteran subgroups. For example, the expanding role of both women and National Guard/Reservist personnel in the contemporary deployments suggests the possibility of more complicated clinical presentations for these subgroups than has been typical of prior wars and conflicts. Information regarding the unique military experiences of these veterans will be of benefit to ongoing efforts to provide the best possible care to an increasingly diverse veteran patient population.

Similarly, knowledge of the breadth of deployment stressors may be used by researchers to plan and conduct more appropriate studies. For example, researchers would be well advised to focus future investigations on understanding the effect of the pressure and ambiguity of insurgency warfare on health outcomes. Moreover, additional research attention to the impact of the increasing length and number of deployments on the health and well-being of military personnel as well as the impact on family relations is clearly warranted, especially as poor marital adjustment has been associated with increased risk of intimate partner violence (Marshall et al., 2005). Knowledge of the unique montage of experiences that define the Iraq War deployment can set the stage for better care for returning veterans of this and future wars.

#### Notes

- 1. This figure reflects the number of U.S. military personnel deaths as of May 19, 2007 in the Iraq War, which, for the purposes of this article, refers to the Gulf region conflict of 2003 until present.
- 2. We duly recognize that there are specific terms for servicemen and servicewomen of each branch of the U.S. Armed Forces, but for the purposes of this article, *soldier* and *troop* are used as all-inclusive terms.
- 3. Please note that although we limited our review of deployment stressors to articles from the northeast region of the U.S., several media reports from other regions are referenced in other sections of the manuscript (i.e., the introduction and discussion).

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